

Aeronautics Division

1998 - 1999

Progress Report



# TABLE OF CONTENTS

## PREFACE - MISSION AND PURPOSE

PAGE

HISTORY ..... 1

AUTHORITY AND RESPONSIBILITY ..... 2

ORGANIZATION CHART ..... 2

ARIZONA AIRPORT SYSTEM ..... 3

    Primary Airport System ..... 4

    Secondary Airport System ..... 5

AIRPORT DEVELOPMENT PROGRAM..... 6

    Programming ..... 6

    Funding ..... 6

        FAA Grant Funds Allocated in Arizona ..... 7

        State Airport Funds Allocated ..... 7

    Project Administration ..... 8

        Completed Airport Development Projects ..... 8

    Technical Assistance ..... 8

    Airport Safety Inspections ..... 9

    Grand Canyon National Park Airport Engineering ..... 9

    Air Service and Aviation Programming/Planning ..... 10

        Statewide Studies ..... 10

        Airport Specific Studies ..... 11

	PAGE
<b>GRAND CANYON NATIONAL PARK AIRPORT .....</b>	<b>13</b>
Grand Canyon National Park Airport Revenues and Expenditures .....	14
Aircraft Operations and Passengers Enplaned .....	
<b>AVIATION SERVICES PROGRAM.....</b>	<b>15</b>
Aviation Services .....	15
Administration .....	15
Administration Revenue and Expenditures .....	16
Aviation Revenue .....	17
State Aviation Fund - Revenue Sources .....	17
Fiscal Year Lieu Tax and Registration Fees.....	18
Calendar Year – Number of Aircraft Registered in Arizona .....	19
Aircraft Registration Data .....	20
Historical Aviation Fuel Tax Data .....	21
Aviation Safety and Education .....	22
Aviation Information .....	22
Aviation/Aerospace Education .....	22
Aviation Safety .....	22
Additional Activities.....	22
Publications .....	23
Other Available Publications .....	23

## Mission Statement

*The mission of the Arizona Division of Aeronautics is to encourage and advance the safe and orderly development of aviation in the State.*

### **The Purpose of the Arizona Aeronautics Division is to:**

**PROVIDE** the citizens of Arizona a safe, balanced and integrated statewide aviation system to meet present and future needs.

**REPRESENT** the state of Arizona in planning, developing, maintaining and operating facilities for the efficient movement of people and goods by air throughout the state.

**ADVOCATE** aviation transportation policies consistent with the overall goals of the state; to enhance the sociological welfare; preserve natural resources and conserve available funding.

**WORK** cooperatively with all entities - public and private - to develop the means for multimodal mobility that will meet community needs as expressed through local planning, land use, patterns of commerce and public dialogue.

**STRIVE** to create and maintain a local state and federal climate that will make action programs and adequate funding available to achieve a level of aviation transportation capacity and quality necessary for Arizona's continued progress.

**RESPOND** to the needs of the public, including their need to know, understand and discuss the aviation transportation issues and developments of the day - and to be continually mindful of the tremendous importance of the mission the department has been given as a public trust.

**ATTRACT** the vital human resources required and reward performance excellence in order to bring the highest degree of professional and technical expertise to the aviation challenges of this state, supported by a meaningful affirmative action program which offers equal self-development opportunities for all.

**IMPROVE** and maintain internal systems, controls, and support services that can assure maximum productivity while using time, manpower, equipment and facilities at optimum efficiency.

**ENCOURAGE** innovative thinking and action directed toward management decisions, policy implementation, systems application and design, research, planning and aviation safety efforts.



Art work throughout this publication are from the 1999 State level winners of the International Aviation Art Contest. Sponsored by the state, National Aeronautic Association, National Association of State Aviation Officials, and Federal Aviation Administration, in cooperation with the Federal Aeronautique Internationale, to motivate and encourage young people of FAI-member nations to become more familiar with and participate in aeronautics, engineering and science.

#### Arizona Winners

##### Category I (Ages 6 – 9 years old)

1 <sup>st</sup> place	Britney N. Childers	Desert Gardens Elementary
2 <sup>nd</sup> place	Tristany Leikem	Henricks School
3 <sup>rd</sup> place	Nicole Fleck	Desert Valley School
Hon. Mention	Amanda Bessette	Black Mountain Elementary
	Dusty Savage	Liberty Traditional

##### Category II (Ages 10 – 13 years old)

1 <sup>st</sup> place	Margaret Neff	Mount Elden Middle School
2 <sup>nd</sup> place	Tara Harvey	Central Christian Academy
	Antonio Pereira	Imes School
3 <sup>rd</sup> place	Michael Jones	Mount Elden Middle School
Hon. Mention	Adam Fratini	Imes School
	Sarah Nichols	Mount Elden Middle School
	Megan Befort	Black Mountain Elementary
	Judith Zamora	Desert Valley School

##### Category III (Ages 14 – 17 years old)

1 <sup>st</sup> place	Douglas Helsel	Mount Elden Middle School
2 <sup>nd</sup> place	Angela Carrasco	Rincon High School
3 <sup>rd</sup> place	Donald Bates	Mount Elden Middle School
Hon. Mention	Irvin Jim	Mount Elden Middle School
	Matt Davis	Mount Elden Middle School

1999 Special Merit award to Ben Giroux of Royal Palm and the Phoenix Art Museum



Tara Harvey, Central Christian Academy



Ben Giroux - Royal Palm, Phoenix Art Museum

## HISTORY

The history of the Arizona Department of Transportation's Aeronautics Division began with the creation of the Arizona Aviation Authority in March of 1950. The Authority originally consisted of an unpaid board of five members serving three year terms. The primary purpose of the board was to advise the Governor and the legislature on aviation matters. In May of 1955, a director was appointed. The Authority started monthly publication of a newsletter in 1956, and an airmarking program to aid in cross-country navigation was initiated in 1958. In 1959, the Authority began to assist communities in developing airfields.

In 1962, the legislature created the Arizona Department of Aeronautics with a seven member board, and appropriated funds to assist in construction of a Grand Canyon Airport. Construction began in 1963, and the airport officially opened two years later.

In 1974, the Departments of Aeronautics, Highways, and Motor Vehicles were combined to form the present-day Arizona Department of Transportation.

### Arizona's Aeronautics Directors

1955 - 1975 James Vercillino  
 1975 - 1975 John Burns  
 1975 - 1978 John Walters

1978 - 1987 Ascencion (Sonny) Najera  
 1987 - 1988 Jack Christopherson  
 1988 - Gary Adams

## AUTHORITY AND RESPONSIBILITY

The Arizona Department of Transportation is composed of five divisions: Aeronautics, Highways, Transportation Planning, Motor Vehicles and Administrative Services. The Aeronautics Division is charged by state law to:

- Encourage and advance the safe and orderly development of aviation in the state
- Assemble and distribute, to the public, information relating to aviation
- Represent the state on issues of routing and rate schedules concerning airline traffic
- Accept federal and other monies for airport development or air navigation facilities
- Ensure that the Grand Canyon National Park Airport is operated and maintained

- License aircraft dealers
- Register non-airline aircraft within the state
- Make recommendations on legislative and policy issues

The Aeronautics Division, since June 1990, has been organized along functional lines of responsibility. The Division Director provides the overall direction to guide the Division's efforts. The Airport Development Program Administrator is responsible for Airport Development, Planning, and Air Service programs. The Aviation Services Program Administrator is responsible for Aviation Revenue/Aircraft Registration, Aviation Safety and Education, Administration, Fiscal Management, Legislative and Legal matters, and the Airports Loan programs. The organizational structure of the Division is shown in the chart below.

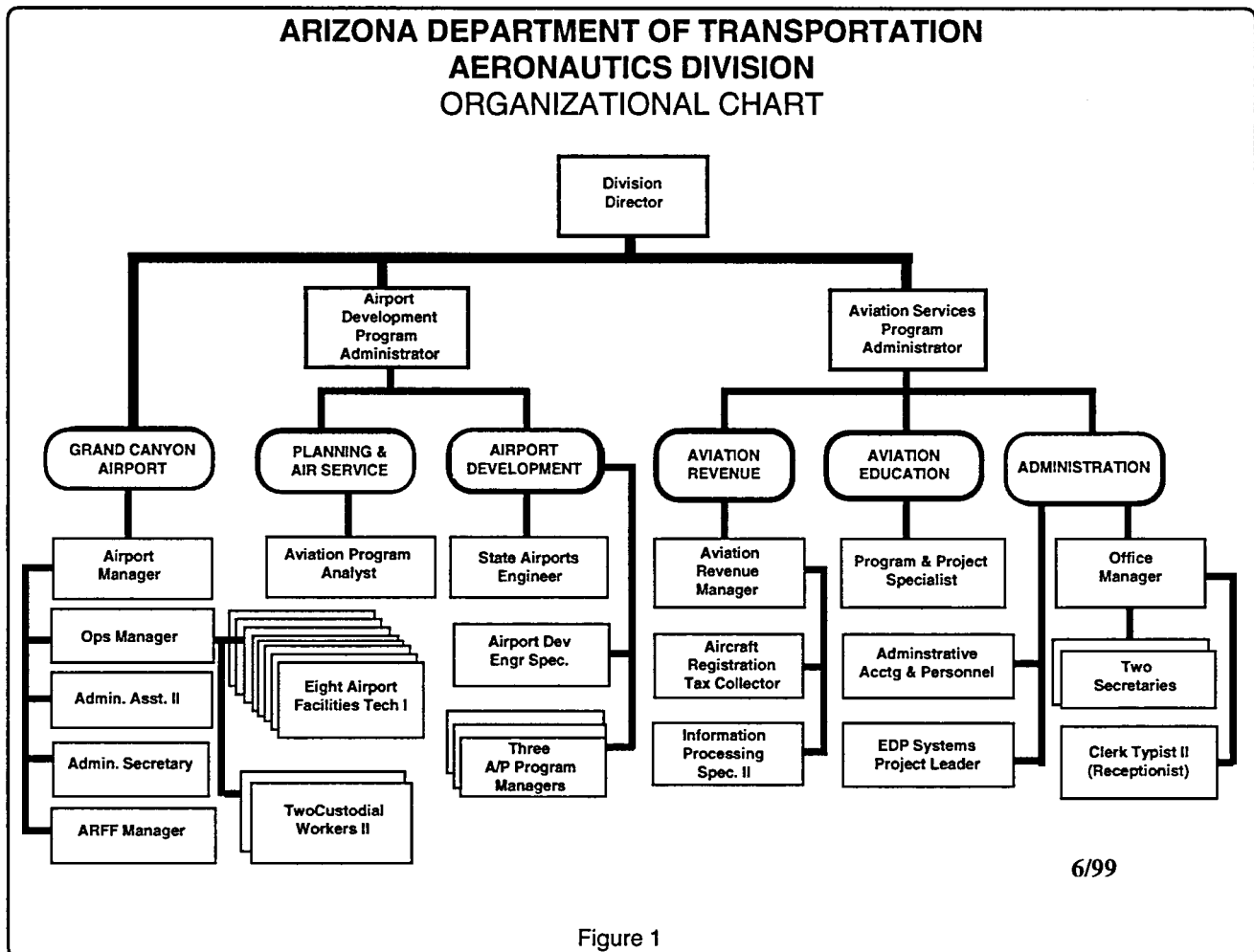


Figure 1



## ARIZONA AIRPORT SYSTEM

Arizona's State Airport System directly connects the state's communities, and provides an essential link with the national systems of airspace and airports. It is considered desirable to provide the general public with no more than a thirty-minute driving time to a public use airport facility. In Arizona, there are 198 airports and 109 heliports registered with the Federal Aviation Administration (FAA). A primary system of 62 airports provides service to 90% of the population (see page 4). Of the 62 primary system airports, 43 are publicly owned, while 8 are Native American and 11 are privately owned.

Primary airports are those airports which meet the following criteria:

- Open to the public
- Ten or more based aircraft or at least 2,000 annual operations

- Scheduled air service by an air carrier or commuter airline on a regular basis
- Projections to meet any one of the above criteria within ten years

Arizona also has a system of secondary airports (see page 5). Secondary airports are typically the less heavily used general aviation airports serving smaller communities and rural areas.

Secondary airports are those airports which meet the following criteria:

- Open to the public
- Not included in the primary system

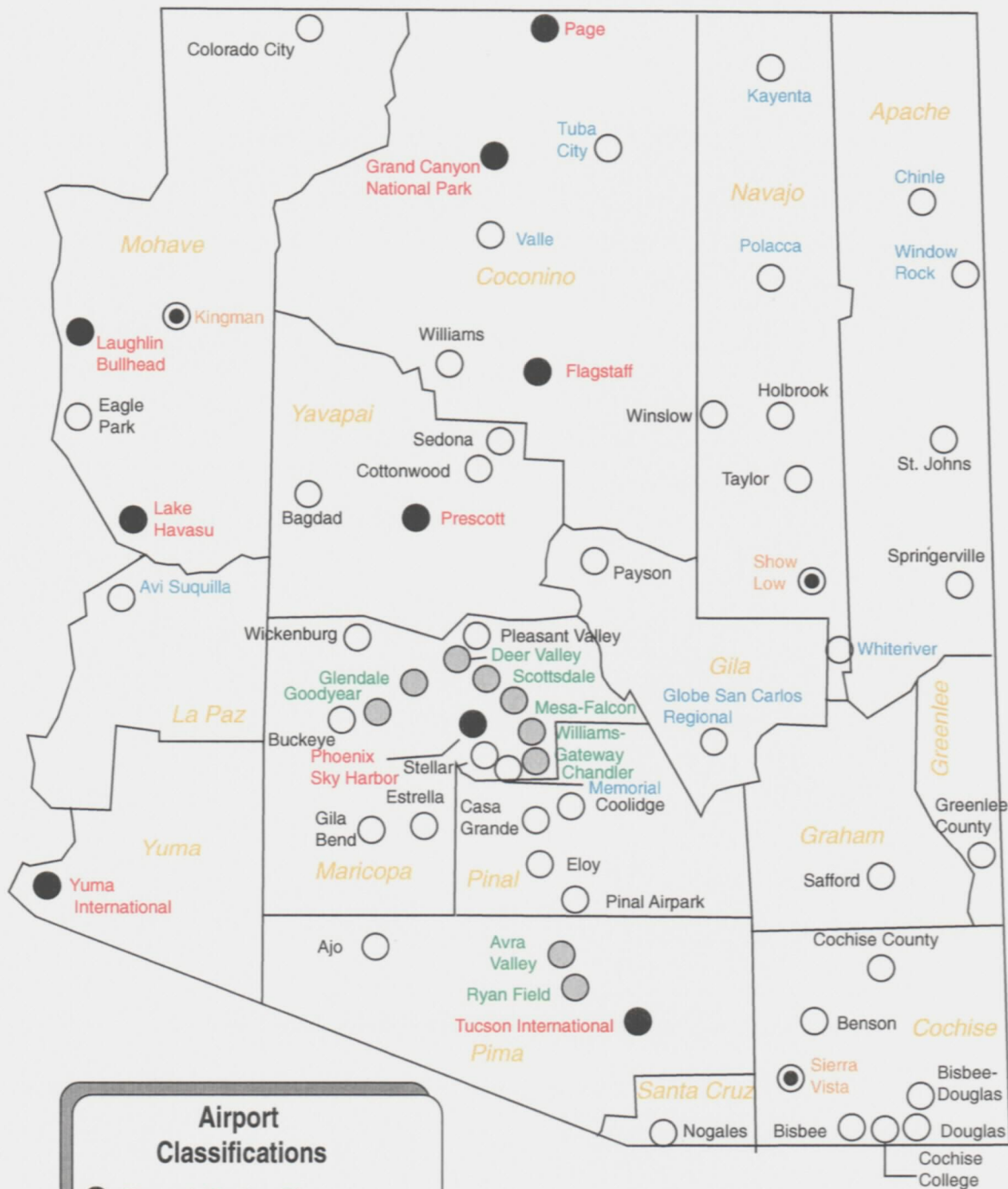
Of the facilities dedicated to helicopters, 105 of the 109 heliports or helistops currently listed by the FAA in Arizona are private-restricted facilities.

**ARIZONA AIRPORT SYSTEM FACILITIES BY TYPE**

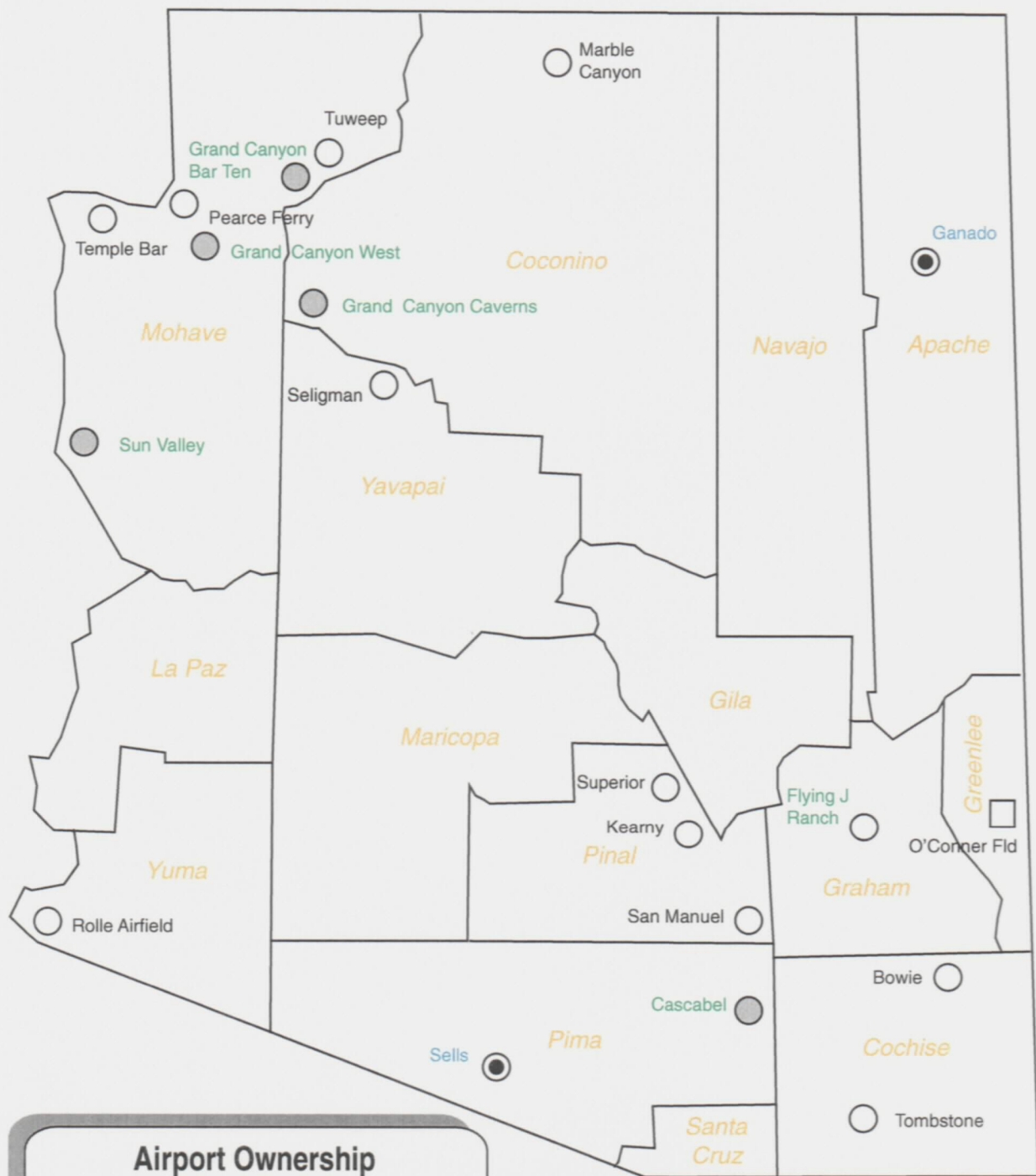
	Primary	Secondary
<b>Primary Commercial Service</b> Airports served by scheduled airlines enplaning 10,000 or more passengers annually.	8	
<b>Non-Primary Commercial Service</b> Airports served by scheduled airlines enplaning 2500 or more passengers annually.	5	
<b>Reliever</b> Airports which relieve congestion at a commercial service airport and provide additional general aviation access to the community.	9	
<b>General Aviation</b> Airports used for general aviation purposes.	40	20
<b>TOTAL SYSTEM AIRPORTS</b>	62	20

Table 1

# State of Arizona Primary Airport System



# State of Arizona Secondary Airport System



## Airport Ownership

- Public
- Private
- Native American
- Future Airport

Secondary System Definition: All public use facilities not in the State's Primary System.

**FY 1999**  
**Aeronautics Division 12-99**  
**Arizona Counties**



## AIRPORT DEVELOPMENT PROGRAM



Tristany Leikem, Henricks School

Under the direction of the Airport Development Program Administrator, this program area has the following responsibilities:

- Administration of the Five Year Airport Development Program and reimbursement of sponsor expenses for eligible project items.
- Technical support for airports and airport projects.
- Engineering guidance for, and administration of Grand Canyon National Park Airport construction projects.
- Airport safety data inspections covering selected public airports
- Air Service and Aviation Programming/Planning

### Programming

The planning process for the Five Year Airport Development Program begins with an extensive evaluation of needs. Needs are prioritized among the airport categories, then included in a program consistent with criteria established by the State Transportation Board. Finally, projects are

evaluated and matched with anticipated funds to create a financially balanced program that optimizes use of available aviation dollars.

### Funding

Airport construction and development funding in Arizona is accomplished through a cooperative effort involving federal, state, and local governments.

Federal funds are derived mainly from taxes on airline tickets and aviation fuel. This past fiscal year, the amount of Federal Airport Improvement Program funds allocated for Arizona airports was over \$47.9 million. Federal funds for Arizona, when viewed in dollars allocated, has fluctuated from year to year, but during the past five years, has remained relatively stable (see figure 2, page 7).

State funds come mainly from flight property tax, lieu taxes on aircraft, and aviation fuel taxes. These taxes are paid into the State Aviation Fund. In Arizona, aviation pays for itself, with no money coming from the state's general fund. Using funds from the State Aviation Fund, the Airport Development Program has increased dramatically over the past decade. State grant funds allocated have increased from \$10 million in FY 1988-89 to \$25.3 million in FY 1998-99 (see figure 3, page 7), an increase of over 151 percent from the beginning 5 to the end of that ten year period.

At the local level, funds for airport construction and development may come from several sources: general fund contributions, revenue from general obligation bonds, user taxes, revenues from airport leases, and concessions. Currently, the local sponsor must provide a matching share of 4.47 percent on federal/state/local projects and a ten percent share on state/local projects. Even with a matching share of only 4.47 or 10 percent, many smaller communities find it difficult to meet this requirement, given the size and extent of the projects necessary to adequately address the needs of their local airport.

## FAA Grant Funds Allocated in Arizona

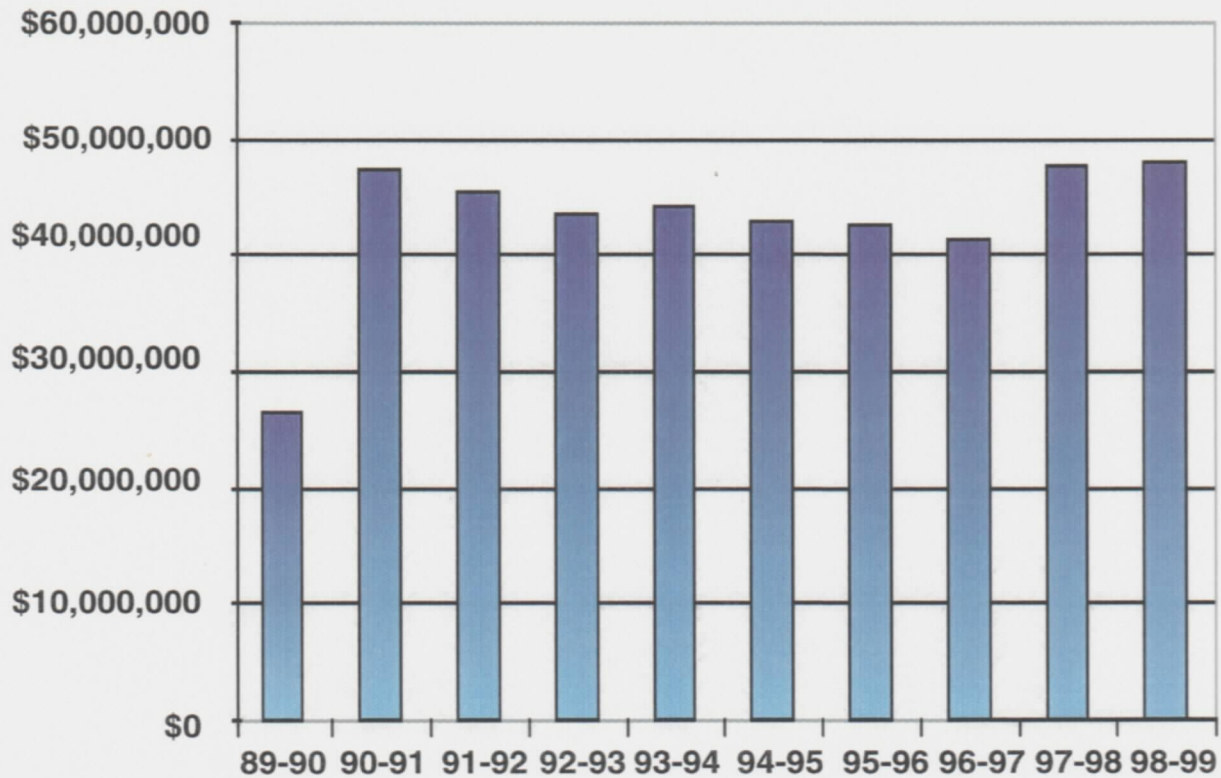


Figure 2

## State Airport Funds Allocated

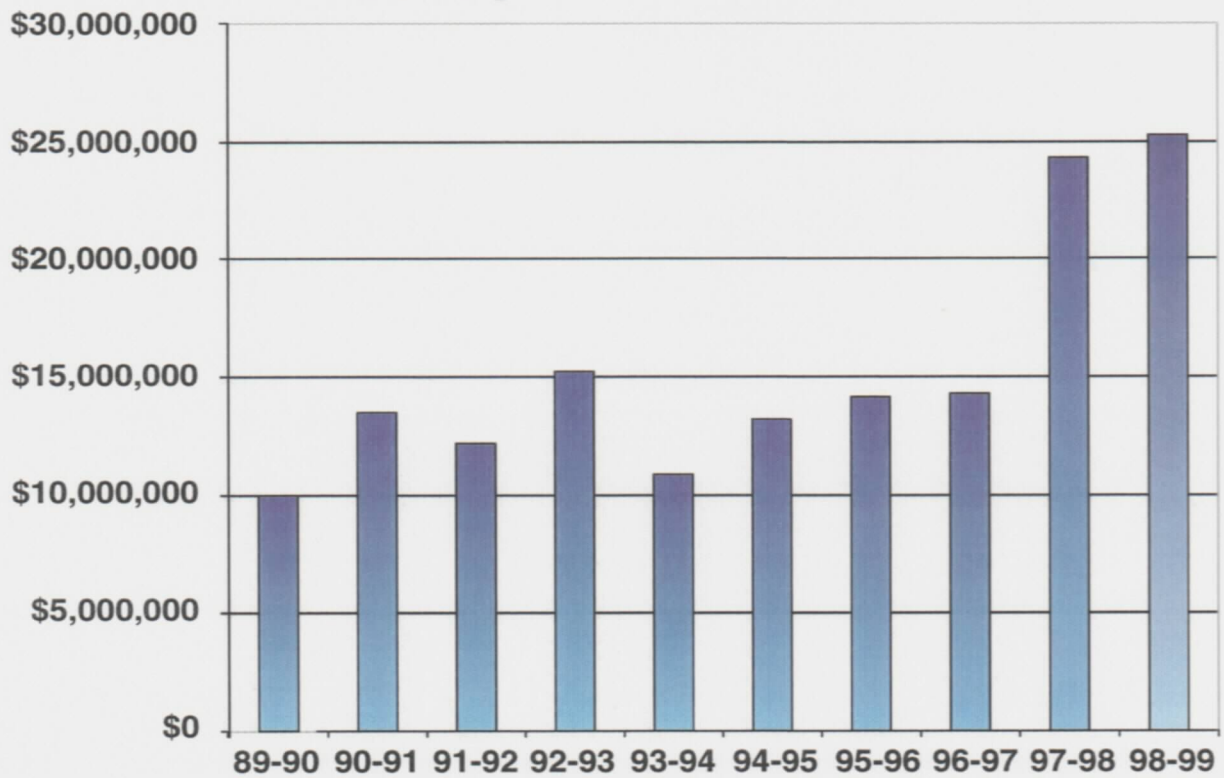


Figure 3



### Project Administration

Airport projects funded through the Five Year Airport Development Program are subject to technical review and monitoring from design through the construction and audit processes.

During the design phase, the Airport Development staff assists sponsors in evaluating and interpreting design criteria. Additional assistance is rendered by reviewing engineering agreements, plans, specifications and contract documents for compliance with state funding requirements.

As the project progresses through the construction phase, the staff reviews bid tabulations, performs field reviews of work during construction, reviews field and laboratory procedures/test results, and analyzes and approves change orders.

At the conclusion of the project, a final inspection is performed. As-built plans and certified quantities are required before final payment is made.

Random auditing of the projects is performed to ensure compliance with contractual requirements. The number of airport projects completed have decreased from 62 completed projects during fiscal year 97-98 to 42 completed projects fiscal year 98 - 99.

### Technical Assistance

The Airport Development staff provides technical support to assure quality construction, optimize construction costs, streamline administrative procedures, and assist local officials in the development of their airport facilities in a cost-effective manner.

The Airport Development staff also provides technical support for special aeronautical studies and for the development of airport plans.

Local airport sponsors may, at any time, receive technical comments and operational guidance concerning improvements or development of their airports.

## Completed Airport Development Projects

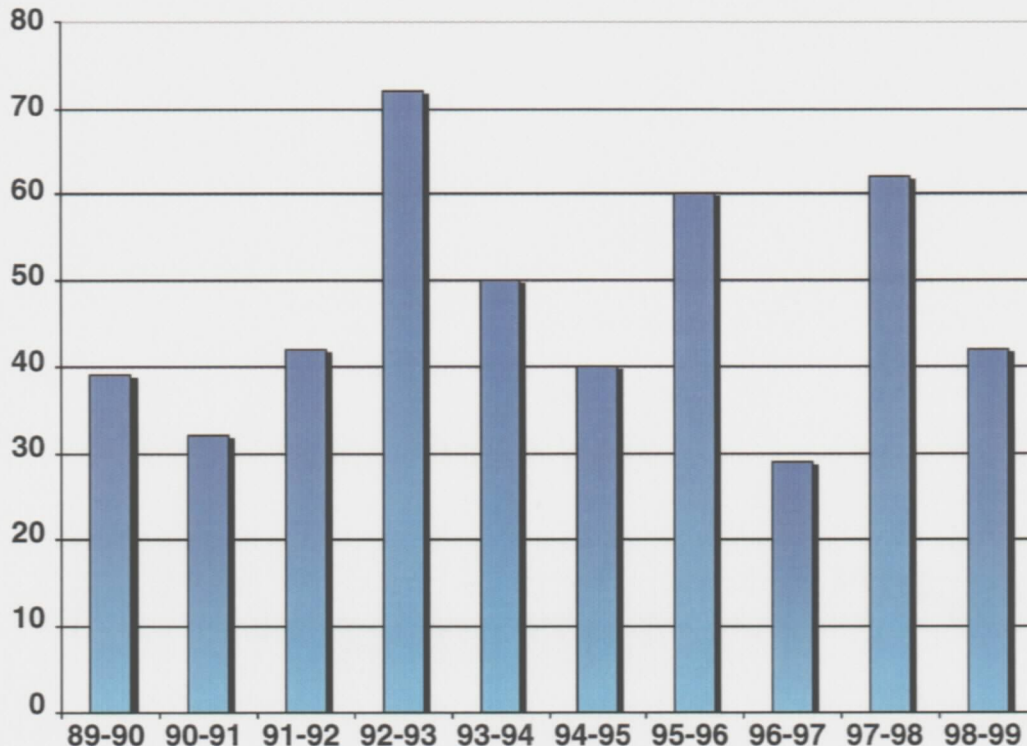


Figure 4

The airport sponsor's administrative burden is being reduced through policies developed by the Airport Development Section. Whenever possible, reporting forms and other documents already required by the federal government are also used for state purposes, helping reduce the amount of man-hours necessary to comply with reporting requirements.

### **Airport Safety Inspections**

During the past year, the Airport Safety Inspection Team visited more than thirty Arizona airports. The team conducted inspections of public use airfield facilities and conditions for the FAA's Airport Safety Data Program.

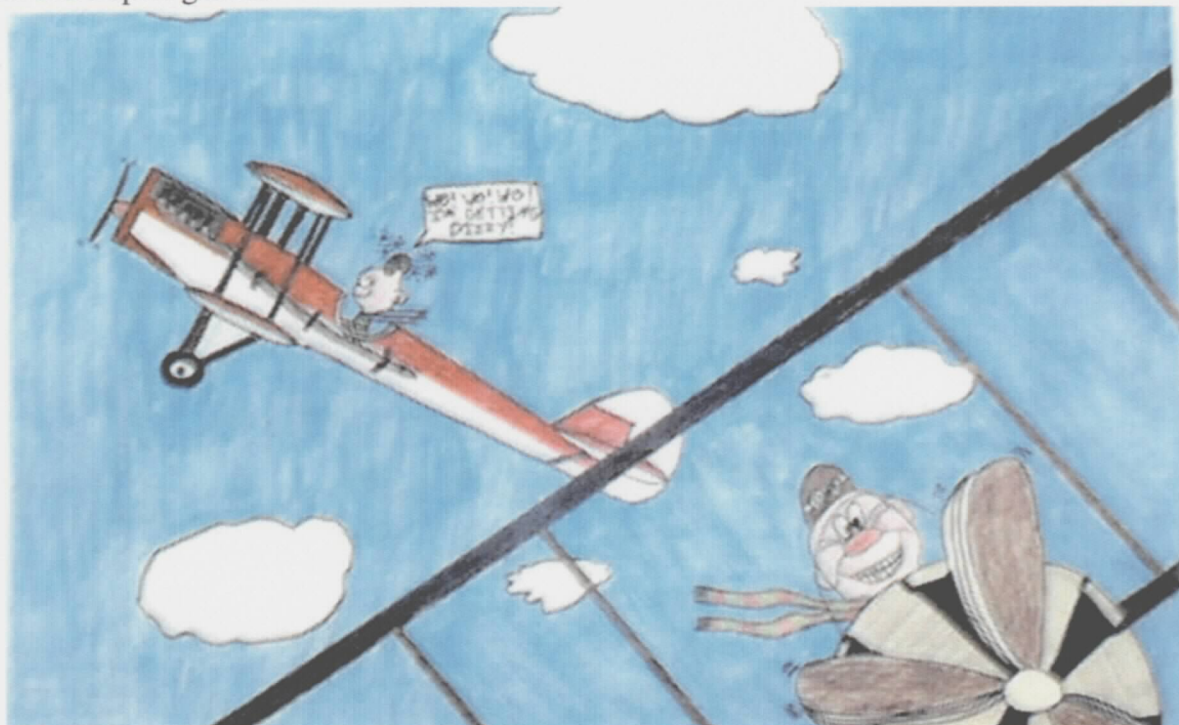
The objectives of the Airport Safety Data Program are: to promote airport safety through contact with airport management; to identify and report safety conditions at airports; and to make safety recommendations to correct deficiencies.

The Airport Safety Data Program also provides airport information for: the federal government's Airport Facility Directory (AFD); the FAA's airport data base; and for publishers of aeronautical charts and airport guides.

### **Grand Canyon National Park Airport Engineering**

The Airport Development Program was responsible for the completion of over twelve million dollars worth of construction projects – administered by consulting engineering firms – at the Grand Canyon National Park Airport. The projects involved extensive pavement rehabilitation as well as water supply and distribution systems, including the construction on two 1.2 million-gallon tanks.

Administrative functions of the airport are scheduled to be turned over to an Airport Authority on October 1, 1999; however, airport engineering technical assistance will continue. Projected to be constructed in FY 2001 is a new air traffic control tower and the relocation of all the Airport's Administrative, Maintenance and Fire/Rescue facilities.



Douglas Helsel, Mount Elden Middle School



## **Air Service and Aviation**

### **Programming/Planning**

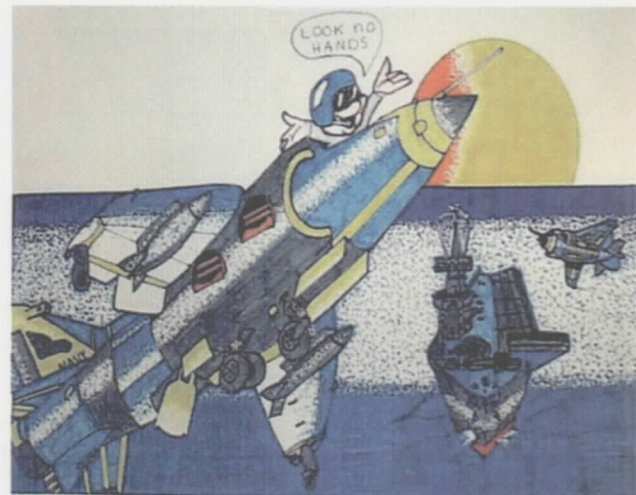
The Aviation Planning Section assists in developing strategies and programs to encourage and advance the safe and orderly long-term development of Arizona's aviation system. This requires ongoing monitoring of system deficiencies, strengths and future demands. To accomplish this goal, the Division maintains a Continuous Planning Process (CPP) for the system. Elements of the CPP include: analysis of current aviation activities for airports in the system, forecasts of future demand on the system, and the ability of the system to meet those needs. Another segment of the CPP includes a Pavement Management System (PMS), used to determine the health of airport pavements and prioritize maintenance and replacement activities.

Division staff continues to support and participate in the regional aviation system planning activities of the Maricopa Association of Governments (MAG) and the Pima Association of Governments (PAG). Staff incorporates these regional studies into the state aviation plan, ensuring proper dovetailing of findings.

### **Statewide Studies**

During the past year, the Division was involved in several study projects. The Navigational Aids and Aviation Services Study was completed, two major aviation studies (Arizona's Rural Air Service Study and The Economic Impact of Aviation in Arizona) were nearing completion and two new studies (State Aviation Needs Study-2000 and Small Community Airports Economic Development Program ) were initiated.

In the final analysis of the Navigational Aids and Aviation Services Study, over 136 facilities were projected navigational aid requirements for Arizona's aviation system in the next 10 years. A summary of the State's requirements are listed in the table on page 12 and include the 1998 cost of acquisition (but not the cost of operating and maintaining the systems).



Irvin Jim, Mount Eldon Middle School

The study also included an analysis of funding participation scenarios based on current and projected policies of the FAA and State. If the FAA participated in the funding of the eligible NAVAID equipment for all commercial reliever and general aviation airports, approximately \$8.3 million could be obtained from the existing AIP program. What is a more likely scenario is that FAA would participate in funding eligible navaid equipment for all Commercial Service and half of the Reliever airports. Under this scenario the FAA contribution might be approximately \$2.1 million with the State being required to budget for nearly 82 percent of the total funding costs.

The Economic Impact of Aviation in Arizona study produced an opportunity to promote the economic impact of aviation at both the County and Community level. In order to provide the counties and communities/airports with a marketing device, the State prepared brochures for 41 airports and 12 counties. The brochures contained aviation economic impact information obtained from the study pertaining to the airport/county as well as general information on county or airport services/facilities. Each airport/county was provided a modest number of brochures as well as a copy of the brochure software files. This method provided the county/airport with the ability to revise and change the brochure to keep it current for several years. Another product of the study was a 15-minute video outlining the salient points of the study with emphasis again, on providing

communities and airports with another marketing tool to promote their aviation assets.

The final piece of the Arizona Rural Air Service Study, a comprehensive summary brochure, was nearing completion at the end of the fiscal year and will be published early next fiscal year. This study, which focused on 14 airports (Grand Canyon National Park, Yuma International, Flagstaff-Pulliam, Laughlin-Bullhead International, Sierra Vista Municipal, Lake Havasu City, Kingman Page Municipal, Show Low Municipal, Ernest A. Love Field, Safford Regional, Sedona, Winslow-Lindberg Regional and Holbrook Municipal Airports) categorized the major aviation elements affecting all the airports. The Study concluded that the most significant aviation elements affecting a community's ability to attract and keep commercial air service were: aircraft size, airline fares, number of departures, enplanement levels and the markets served. A capsule history of how each airport/community was affected by these elements was prepared and analyzed. The Study recommended the following actions to be taken by each of the communities:

- Six of the nine communities already being served by commercial service can support an increase in the size of the aircraft serving the community.
- Six of the nine communities can support another hub city.
- Four of the nine communities can support an increase in the number of existing departures.
- Two communities (Show Low and Safford) can support commercial air service to their communities if they subsidize some of the airline operational and/or marketing costs.

The Study emphasized that communities need to establish programs to attract and encourage airlines to provide them with air service, such as collecting surveys, promoting air service to the business community and assisting in the airlines marketing/promotional campaign in the community. It was recommended that the State be responsible for:

- Providing technical assistance to rural communities

- Encouraging dialogue between air carriers and communities
- Increasing the priority for air service facility improvement projects both at the State and federal level
- Encouraging and assisting in the airline marketing efforts of communities
- Encouraging competition for air service at rural community airports.

Two new studies were also begun during the latter part of the fiscal year: The Arizona Pavement Maintenance System (PMS) and the Airports and Transportation Small Community Economic Development Program (ASCET). The PMS study will incorporate a historical database of the pavements at public airports throughout the aviation system in Arizona and provide a comprehensive evaluation platform which the Division can use to track pavement management and forecast pavement maintenance needs.

The ASCET study, an economic development initiative for Arizona's small communities, sought to identify economic development projects that would enhance the small community's development. This study will use the results of the Arizona Air Service Study, the State Aviation Needs Study and the Economic Impact of Aviation in Arizona study to determine needs and develop a program specifically aimed at providing capital improvement funds in support of small communities. This program is centered on the airport's market niche and focused on finding all available revenue sources that could be used in the development process. The project list will be examined for projects that enhance economic development and then those projects will be ranked by priority. The goal of the program is funding these development projects to produce jobs within the community and promote the community's economic development. The ASCET Program focused on the same airports/communities as the Arizona Air Service Study.

The State Aviation Needs Study-2000, a study the Division conducts every five years, was initiated during the last quarter of the fiscal year. This study

was required to dovetail with the Governor's Vision 21 Task Force charge to examine all modes of transportation within the State, establish future goals and recommend a program that will balance both rural and urban needs.

A number of other studies are planned in the coming year: an update of the Arizona Recreational Airport Study; an update of the Land Use Compatibility Study; and a pre-qualification plan for aviation consultants interested in performing planning work for the Aeronautics Division.

### Airport Specific Studies

The planning staff establishes guidelines and procedures, in conjunction with the FAA, for individual airport planning. Airport specific studies for proposed airport projects include:

- Site Selection Studies
- Airport Master Plans
- Airport Noise Studies
- Environmental Assessment Studies

Projects completed last year include Airport Master Plans for: Buckeye Municipal, O'Conner Field in Duncan, Ajo Municipal, Marana, Northwest Regional (formerly Avra Valley Airport), Colorado City Municipal, Coolidge Municipal, Globe San Carlos Regional and Prescott-Ernest A. Love Field. Airport Layout Plans approved by FAA during the year include: Ajo Municipal, Cochise County, Phoenix-Goodyear Municipal, Winslow-Lindberg, and Colorado City Municipal. There is one Feasibility and Site Selection Study underway for Peoria and two FAA Part 150 Noise Studies (Williams-Gateway and Chandler Municipal) that should be completed next year.

An Environmental Assessment was completed on O'Conner Field in Duncan, Arizona that is awaiting FAA action. Two additional Environmental Assessments were underway for Douglas Municipal and Wickenburg Municipal.

NAVAID	2000 - 2005	2005 - 2007	2008 - 2010	TOTAL COST
MALSR & SSALS (12)	\$ 150,000	\$2,000,000	\$ 750,000	<b>\$2,900,000</b>
AWOS-A & AWOS-3 (41)	\$1,180,000	\$ 465,000	\$ 685,000	<b>\$2,230,000</b>
AWOS-3 to - 4 Upgrade (16)	\$ 0	\$ 0	\$1,600,000	<b>\$1,600,000</b>
Weather Center (1)	\$ 204,000	\$ 0	\$ 0	<b>\$ 204,000</b>
VISAIDS (56)	\$ 821,000	\$ 821,000	\$ 821,000	<b>\$2,463,000</b>
GCO (11)	\$ 132,000	\$ 0	\$ 0	<b>\$ 132,000</b>
Annual Replacement Fund	\$2,254,000	\$ 901,600	\$1,352,400	<b>\$4,508,000</b>
<b>TOTAL</b>	<b>\$4,701,000</b>	<b>\$4,107,600</b>	<b>\$5,228,400</b>	<b>\$14,037,000</b>

**MALSR = Medium Intensity Approach Lighting System with Runway Alignment Indicator Lights**

**SSALS = Simplified Short Approach Lighting System**

**AWOS-A = Automated Weather Observing System - reports altimeter setting**

**AWOS-3 = Automated Weather Observing System - reports altimeter setting, wind, temperature, dewpoint, density altitude and ceiling**

**VISAIDS = Visual Aids**

**GCO = Ground Communications Outlet**



## GRAND CANYON NATIONAL PARK AIRPORT

The Aeronautics Division is responsible for the maintenance, operation and improvements of the only active state-owned airport in Arizona, the Grand Canyon National Park Airport.

The Grand Canyon National Park Airport is located in Tusayan, seven miles from the south rim. The present day facility incorporates the site of the first official Grand Canyon airport, a landing field authorized by the U.S. Forest Service for commercial flights in 1925. The Arizona Department of Aeronautics was instrumental in the acquisition and construction of the airport. The Grand Canyon National Park Airport was originally constructed with funds from the Department of Interior, the Federal Aviation Administration and the state of Arizona. The new airport first

opened for business in October, 1965. The airport terminal was completed and formally dedicated on October 20, 1967.

Today, the airport is the third most active air carrier airport in the state, following Phoenix Sky Harbor International Airport and Tucson International Airport. The airport is served by over 40 air taxi and commuter carriers. For fiscal year 1998-99, Grand Canyon National Park Airport annual aircraft operations totaled 170,193 with 1,091,285 passengers enplaned and deplaned.

During FY 99 the Arizona State Legislature created the Grand Canyon A/P Authority to own and operate the Grand Canyon National Part Airport. The transfer effective date is October 1, 1999.



Angela Carrasco, Rincon High School

**GRAND CANYON NATIONAL PARK AIRPORT  
REVENUE AND EXPENDITURES  
AIRCRAFT OPERATIONS AND PASSENGERS ENPLANED**

	1994-95	1995-96	1996-97	1997-98	1998-99
<b><u>REVENUE</u></b>	\$1,364,000	\$1,401,357	\$1,490,138	\$1,340,539	\$1,044,477
Percent Change	12.6%	2.7%	6.3%	-11%	-22.1%
	=====	=====	=====	=====	=====
<b><u>EXPENDITURES</u></b>					
<b><i>ADMINISTRATIVE</i></b>					
Full Time Employees	15	15	15	15	15
Personal Services	\$313,063	\$319,765	\$312,967	\$335,107	\$310,144
Employee Related Expenses	\$97,096	\$96,939	\$93,286	\$97,029	\$60,158
Professional Services	\$0	\$2,394	\$0	\$0	\$0
Travel	\$7,804	\$5,242	\$3,385	\$3,415	\$4,546
Other Operating Expenses	\$240,870	\$254,859	\$267,700	\$243,475	\$204,077
Non-Capital Equipment	-	-	-	\$1,592	\$591
Capital Equipment	<u>\$5,500</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>
<b><i>TOTAL ADMINISTRATIVE</i></b>	<b>\$664,333</b>	<b>\$679,199</b>	<b>\$677,338</b>	<b>\$680,618</b>	<b>\$579,516</b>
Percent Change	10.7%	2.24%	-0.28%	0.48%	-14.9%
<b><i>CAPITAL IMPROVEMENT EXPENDITURES (State \$)</i></b>	<b><u>\$1,215,900</u></b>	<b><u>\$703,164</u></b>	<b><u>\$781,646</u></b>	<b><u>\$3,424,611</u></b>	<b><u>\$671,762</u></b>
<b>TOTAL EXPENDITURES</b>	<b><u>\$1,880,233</u></b>	<b><u>\$1,382,363</u></b>	<b><u>\$1,458,984</u></b>	<b><u>\$4,105,229</u></b>	<b><u>\$1,251,278</u></b>
	=====	=====	=====	=====	=====
<b><u>NET INCOME (LOSS)</u></b>	<b>(\$516,233)</b>	<b>\$18,994</b>	<b>\$31,154</b>	<b>(\$2,764,690)</b>	<b>(\$206,801)</b>
<b><i>AIRCRAFT OPERATIONS</i></b>	<b>183,239</b>	<b>204,920</b>	<b>194,615</b>	<b>190,442</b>	<b>170,193</b>
Percent Change	-2.6%	11.8%	-6%	-2.2%	-10.6%
<b>PASSENGERS ENPLANED/ DEPLANED - Percent Change</b>	<b>1,059,139 -1%</b>	<b>1,241,589 17.2%</b>	<b>1,231,050 -0.9%</b>	<b>1,200,892 -2.5%</b>	<b>1,091,285 -9.13%</b>

Source: Aeronautics Division, Arizona Department of Transportation -- Unaudited Financial Records

**Table 3**



## AVIATION SERVICES PROGRAM



Donald Bates, Mount Elden Middle School

The Division Director, the Program Administrators for Airport Development and Aviation Services, and the Grand Canyon Airport Manager make up the Aeronautics Division's management team. The management team plans, establishes, and implements the overall policy direction for the Division. For the purposes of this report, the management team's activities are included here under Aviation Services.

The Division Director has taken an active role in representing the state of Arizona in local, as well as national forums concerning important aviation matters. Over several years, the Division Director has been deeply involved in several aviation issues of national significance: airspace issues at national parks; federal Airport Improvement Program (AIP) funding; and air tour industry safety.

The Division Director is active in the National Association of State Aviation Officials (NASAO). NASAO is made up of, and represents the state government aviation agencies in all 50 states and Puerto Rico and Guam. NASAO was formed in 1930 with a primary mission of encouraging cooperation and mutual aid between the states and federal and local governments and to develop a state and national air transportation system that is responsive to regional, state, and national needs. In fiscal year 96-97, Division Director, Gary Adams

was recognized by the Arizona Airports Association (AzAA) for his many years of work dedicated to the improvement of airports in Arizona. He was awarded with the first-ever *Arizona Airports Association's Award of Distinction for Exemplary Service to Arizona's Airports*.

### AVIATION SERVICES

Under the direction of the Aviation Services Program Administrator, this program area has the following responsibilities:

- Aviation safety and educational programs
- Aircraft registration process, collect aviation revenue, and license aircraft dealers
- Airport Loan Program
- Grand Canyon National Park Airport Administration
- Fiscal Management
- Contract, Legal and Legislative Issues
- Administrative services and support for the Aeronautics Division

### Administration

Administration provides a myriad of functions and services for the Division. The administrative function is responsible for secretarial and clerical support, records management, and personnel services. The Section is continually involved with a wide spectrum of aviation issues.

The Aviation Services Program Administrator is the Division's legislative liaison, directly responsible for review and comments on legal and regulatory matters, as well as the communication of the Division's views to the legislative branch. In addition, the Aviation Services Program Administrator is responsible for the preparation of



**AERONAUTICS DIVISION  
ADMINISTRATION  
REVENUE AND EXPENDITURES**

	1994-95	1995-96	1996-97	1997-98	1998-99
<b><u>REVENUE</u></b>					
Flight Property Tax	\$13,783,627	\$18,564,298	\$17,679,764	* \$7,582,939	\$7,489,832
Aviation Fuel Tax	\$254,630	\$512,328	\$514,687	\$485,333	\$671,799
Aircraft Lieu Tax	\$1,517,470	\$1,793,314	\$1,852,090	\$2,066,492	\$2,373,833
Aircraft Registration Fees	\$24,665	\$25,395	\$28,215	\$30,360	\$30,810
Airport Loans - Interest		\$107,263	\$133,835	\$332,768	\$306,307
Airport Loans - Principal		\$343,802	\$320,865	\$404,170	\$430,292
Miscellaneous & Investments	<u>\$1,410,326</u>	<u>\$1,895,329</u>	<u>\$2,613,848</u>	<u>\$2,507,355</u>	<u>\$1,874,684</u>
<b>TOTAL REVENUE</b>	<b>\$16,990,718</b>	<b>\$23,241,729</b>	<b>\$23,143,304</b>	<b>\$13,409,417</b>	<b>\$13,177,557</b>
Percent Change	9.3%	36.8%	0.43%	- 43%	- 1.73%
	=====	=====	=====	=====	=====
<b><u>EXPENDITURES</u></b>					
<b>ADMINISTRATIVE</b>					
Full Time Employees	18	18	18	18	18
Personal Services	\$442,962	\$397,799	\$403,475	\$449,369	\$511,813
Employee Related Expenses	\$103,159	\$93,316	\$90,730	\$89,291	\$147,732
Professional Services	\$79,688	\$49,394	\$12,567	\$682	\$18,894
Travel In-State	\$17,812	\$16,227	\$15,964	\$18,936	\$19,310
Travel Out-of-State	\$12,677	\$12,541	\$15,578	\$14,142	\$12,944
Other Operating Expenses	\$114,314	\$158,065	\$165,874	\$287,209	\$307,355
Non-Capital Equipment	-	-	-	\$9,359	\$29,880
Capital Equipment	\$32,968	\$0	\$42,792	\$62,038	\$0
Reimburse Highway Fund	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>
<b>TOTAL ADMINISTRATIVE</b>	<b>\$803,580</b>	<b>\$727,342</b>	<b>\$746,980</b>	<b>\$931,026</b>	<b>\$1,047,928</b>
Percent Change	12.5%	-9.5%	+2.7%	+24.6%	+12.5%
<b>AIRPORT LOAN PROG.</b>					
Revenue Generating		\$3,250,000	\$972,000	\$0	\$1,224,900
Grant Advance		<u>\$1,700,000</u>	<u>\$7,333,000</u>	<u>\$1,750,000</u>	<u>\$2,697,806</u>
<b>TOTAL AIRPORT LOANS</b>		<b>\$4,950,000</b>	<b>\$8,305,000</b>	<b>\$1,750,000</b>	<b>\$3,922,706</b>
<b>AIRPORT DEVELOPMENT</b>					
<b>EXPENDITURES (State \$)</b>	<b><u>\$7,364,014</u></b>	<b><u>\$8,567,890</u></b>	<b><u>\$10,934,008</u></b>	<b><u>\$16,079,749</u></b>	<b><u>\$20,177,760</u></b>
<b>TOTAL EXPENDITURES</b>	<b><u>\$8,167,594</u></b>	<b><u>\$14,245,232</u></b>	<b><u>\$19,985,988</u></b>	<b><u>\$18,760,775</u></b>	<b><u>\$25,148,394</u></b>
	=====	=====	=====	=====	=====
<b><u>NET INCOME (LOSS)</u></b>	<b>\$8,823,124</b>	<b>\$8,996,497</b>	<b>\$3,157,316</b>	<b>(\$5,351,358)</b>	<b>(\$11,970,837)</b>

\* Decrease in revenue reflects new legislation which decreased the amount of Flight Property Tax revenue deposited into the Aviation Fund from 100% to 50%. The other 50% is now deposited into the State's General Fund.

Source: Aeronautics Division, Arizona Department of Transportation --Unaudited Financial Records

**Table 4**

budgets, the design and use of accounting and fiscal controls, general management policy, and the preparation and management of all contracts. The Program Administrator is also responsible for the administration and coordination of: the Arizona Airport of the Year Program and Award; and Arizona's portion of the International Aviation Art Contest. The 1999 Airport of the Year was awarded to Glendale Municipal Airport.

Annually, the state legislature reviews and approves an administrative budget from the State Aviation Fund, for the Aeronautics Division. A portion of the budget is designated for Aeronautics Division operations with the remainder earmarked for airport construction and development. The State Transportation Board, through public hearings and a priority rating system, approves individual airport construction projects as published in the Five-Year Airport and Highway Construction Program. (See Airport Development Section for details.)

In fiscal years 1992 through 99, the state's Airport Development Grant Program was supplemented by the Airports Loan Program. The Airport Loan Program, which is coordinated and administered by the Aviation Services Program Administrator, offers loans for revenue generating improvements to airports. Priority has been placed on projects such as: hangers, terminals and fuel farms. During FY 99, loans totaling approximately \$4 million were provided to Arizona airports.

### **Aviation Revenue**

The Aviation Revenue Section is responsible for:

- The collection of general aviation aircraft registration fees and lieu tax
- The monitoring, forecasting and assisting in the collection of other revenues for the State Aviation Fund
- The licensing of aircraft dealers

The Aviation Revenue Section is also responsible for the collection, monitoring, and assisting in forecasting State Aviation Fund revenues. The

State Aviation Fund receives revenue from a variety of sources including:

- Flight property taxes levied on scheduled airline aircraft
- Aviation fuel taxes
- Aircraft lieu tax and registration fees on non-airline aircraft
- Revenues from the operation of the Grand Canyon National Park Airport
- Interest from the Airports Loan Program
- Interest income on aviation funds on deposit

State Aviation Fund revenues collected are deposited in the State Aviation Fund and can only be used for the construction, development, and improvement of publicly-owned airports throughout the state.

The Aviation Revenue Section works closely with various law enforcement agencies. The Division's records are useful in determining true ownership as well as historical background of an aircraft. Some of the agencies which use aircraft registration information include the Federal Bureau of Investigation (FBI), Drug Enforcement

### **CALENDAR YEAR 1998**

**AIRCRAFT REGISTERED: 5,798**

LANDPLANE	4,113
HM BLT/EXPERIMENTAL	508
ROTORCRAFT	162
BALLOON	144
GLIDER	109
AGRICULTURAL	54
MILITARY SURPLUS	54
ANTIQUE	60
CLASSIC/WARBIRD	594

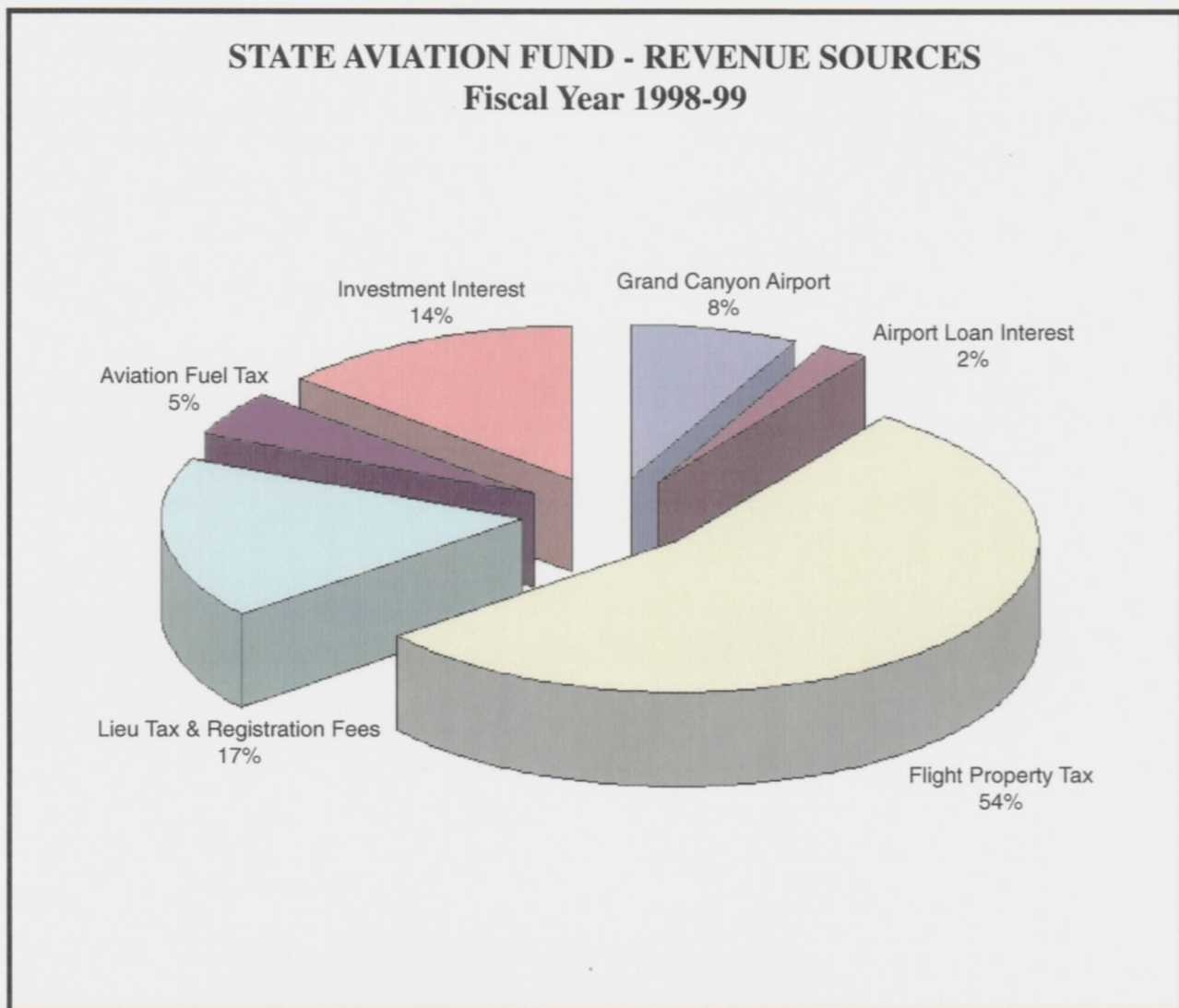
**Table 5**



Administration (DEA), Department of Public Safety (DPS), Internal Revenue Service (IRS), National Narcotics Border Interdiction System (NNBIS), sheriff's offices and city police departments. The on-line records system has been very beneficial to law enforcement agencies. The Aviation Revenue section also works with other federal, state and local governments such as the Federal Aviation Administration (FAA), Department of Revenue, Emergency Medical Services, Arizona Corporation Commission, Industrial Commission of Arizona and the Department of Economic Security.

Aircraft registration information is available to consultants, engineering firms and various planning groups for airports planning as well as for forecasting purposes. Registration information is also made available to airports to assist in identifying aircraft and owners.

In 1995, House Bill 2112 of the 42nd Legislature was passed. This Bill redefined the criteria for the abandoned aircraft category and made other changes that allow for additional customer service improvements to the aircraft registration statutes. These changes are customer-friendly and clarify aircraft registration requirements and processes.



**Figure 5**

### Fiscal Year Lieu Tax and Registration Fees

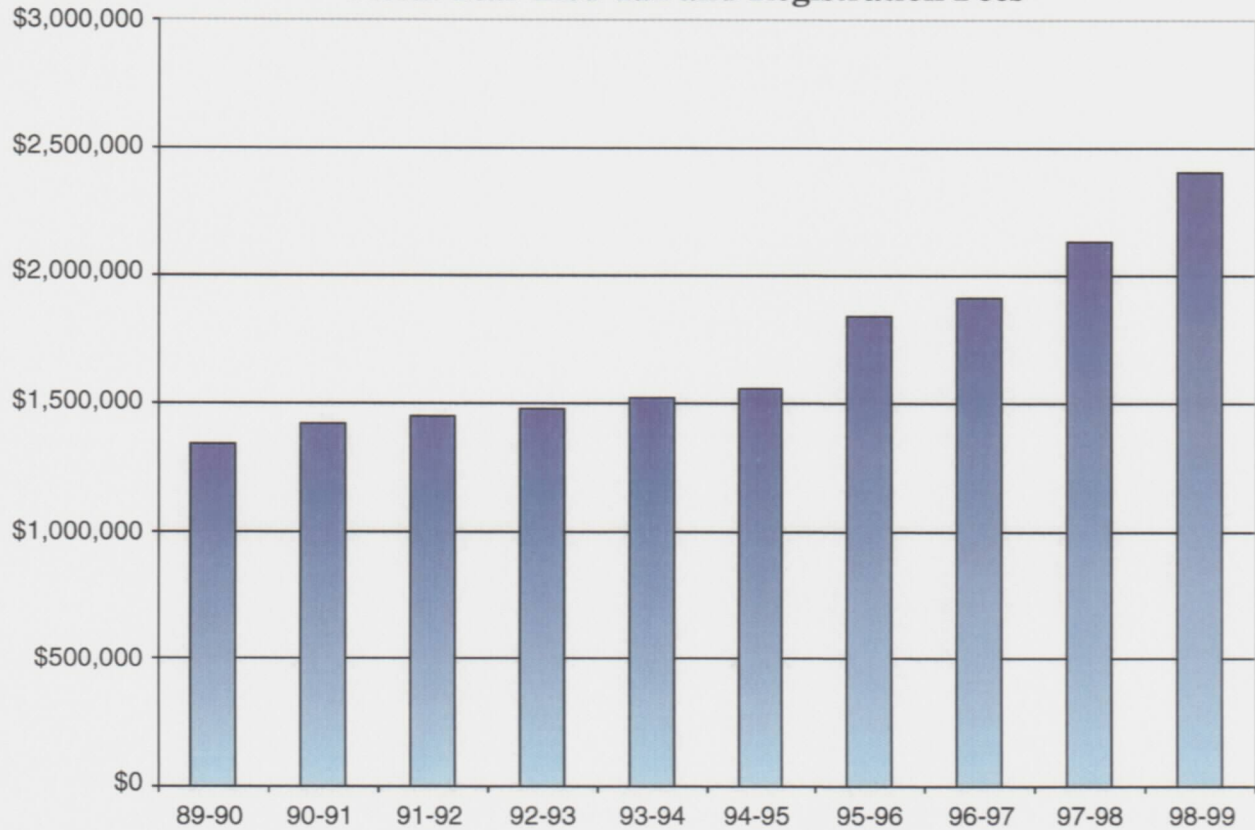


Figure 6

### Calendar Year - Number of Aircraft Registered in Arizona

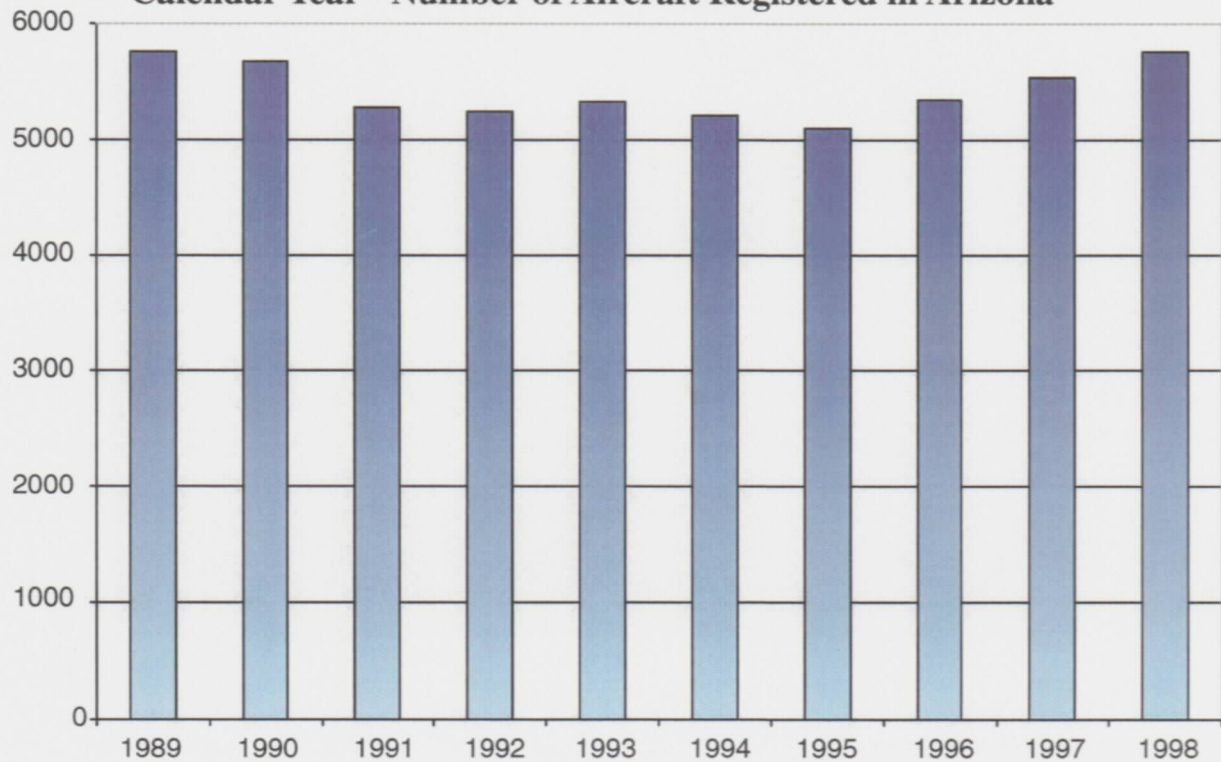


Figure 7



## AIRCRAFT REGISTRATION DATA

<u>FISCAL YEARS</u>	<u>AIRCRAFT (1) REGISTERED</u>	<u>AIRCRAFT LIEU TAX</u>	<u>AIRCRAFT REG. FEE</u>	<u>PENALTY</u>	<u>INTEREST</u>	<u>TOTAL REV. TAX &amp; REG.</u>
69-70	2,135	\$105,058	\$10,876			\$160,930
70-71	2,499	\$160,731	\$12,248			\$172,979
71-72	2,945	\$210,202	\$15,238			\$225,440
72-73	3,283	\$239,821	\$16,308			\$256,129
73-74	3,463	\$424,776	\$18,641			\$443,417
74-75	3,487	\$468,546	\$19,590			\$448,136
75-76	4,073	\$511,330	\$19,585			\$530,915
76-77	4,372	\$699,569	\$22,213	\$15,510	\$2,864	\$740,156
77-78	5,131	\$941,568	\$23,129	\$9,295	\$1,668	\$980,791
78-79	5,289	\$1,264,776	\$24,972	\$10,800	\$1,409	\$1,301,957
79-80	5,403	\$1,608,107	\$26,156	\$19,372	\$5,123	\$1,658,757
80-81	5,846	\$1,851,033	\$27,460	\$18,662	\$8,374	\$1,905,649
81-82	6,009	\$1,904,154	\$27,276	\$19,764	\$9,210	\$1,960,405
82-83	6,062	\$1,949,822	\$28,210	\$25,807	\$15,267	\$2,019,106
83-84	6,000	\$2,194,838	\$29,138	\$24,268	\$16,311	\$2,264,555
84-85	6,159	\$2,521,643	\$29,200	\$21,900	\$16,892	\$2,589,635
85-86	6,162	\$2,567,490	\$30,116	\$21,940	\$10,285	\$2,597,606
86-87(2)	6,150	\$1,297,328	\$28,650	\$19,265	\$10,144	\$1,355,387
87-88	6,133	\$1,162,980	\$27,500	\$20,894	\$10,662	\$1,222,036
88-89	5,969	\$1,121,900	\$26,100	\$13,500	\$9,700	\$1,171,200
89-90(3)	5,754	\$1,288,750	\$24,750	\$18,060	\$8,451	\$1,340,012
90-91	5,670	\$1,374,723	\$27,280	\$14,175	\$5,959	\$1,422,137
91-92(4)	5,291	\$1,404,933	\$26,285	\$15,740	\$773	\$1,447,731
92-93	5,258	\$1,429,867	\$25,275	\$19,655	\$190	\$1,474,989
93-94	5,341	\$1,473,081	\$26,420	\$23,345	\$60	\$1,522,906
94-95	5,212	\$1,517,470	\$24,665	\$18,835	\$155	\$1,561,125
95-96	5,104	\$1,793,314	\$25,395	\$22,560	\$46	\$1,841,315
96-97	5,347	\$1,852,090	\$28,215	\$32,930		\$1,913,235
97-98	5,538	\$2,066,492	\$30,360	\$33,175		\$2,130,027
98-99	5,798	\$2,373,833	\$30,810	\$24,551		\$2,429,194

(1) Calendar Year Data

(2) Decrease in revenue reflects tax reform legislation cutting tax rate in half.

(3) As a result of new legislation requiring stored aircraft to pay a fee, the total number of registered aircraft has decreased due to owners having aircraft deregistered with the FAA, voiding the requirement to register with the State.

(4) As a result of new legislation the penalty fee was revised and interest was eliminated.

Source: Aeronautics Division, Arizona Department of Transportation  
Unaudited Financial Records

**Table 6**  
**20**

## HISTORICAL AVIATION FUEL TAX DATA

<u>FISCAL YEAR</u>	<u>GALLONS OF FUEL</u>	<u>1¢/GAL AVIATION FUEL TAX</u>	<u>5¢/GAL AVIATION FUEL TAX</u>	<u>UNCLAIMED/ UNREFUNDED AV FUEL TAX</u>	<u>TOTAL FUEL TAX REVENUE</u>
69-70	5,331,384	\$34,528		\$105,996	\$140,524
70-71	5,818,298	\$59,367		\$110,462	\$169,829
71-72	6,144,510	\$60,307		\$107,932	\$168,239
72-73	5,885,395	\$59,395		\$126,475	\$186,870
73-74	6,444,930	\$64,207		\$130,815	\$195,022
74-75	6,871,623	\$69,781		\$143,084	\$212,865
75-76	7,075,481	\$68,343		\$174,982	\$243,325
76-77	9,577,534	\$72,506		\$186,152	\$258,658
77-78	9,541,147	\$69,926		\$213,890	\$283,816
78-79	8,159,000	\$85,159		\$254,113	\$339,272
79-80	9,054,499	\$90,545		\$252,089	\$342,634
80-81	12,453,322	\$124,533		\$317,742	\$442,275
81-82	11,228,545	\$112,285		\$268,315	\$380,600
82-83	8,482,597	\$84,826		\$229,812	\$314,638
83-84	8,227,983	\$82,279		\$284,747	\$367,026
84-85	7,637,721	\$76,377		\$305,734	\$382,111
85-86	6,471,370	\$64,714		\$336,316	\$401,030
86-87(1)	8,202,591	\$11,900	\$350,629	\$81,779	\$444,308
87-88(2)	8,929,382		\$306,774		\$306,774
88-89	10,276,177		\$502,765		\$502,765
89-90	10,610,226		\$530,511		\$530,511
90-91	11,033,960		\$551,698		\$551,698
91-92	10,061,760		\$503,088		\$503,088
92-93(3)	7,934,660		\$396,733		\$396,733
93-94	13,815,040		\$690,752		\$690,752
94-95	8,859,600		\$442,980		\$442,980
95-96	10,246,566		\$512,328		\$512,328
96-97	10,293,740		\$514,687		\$514,687
97-98	9,706,660		\$485,333		\$485,333
98-99	13,435,980		\$671,799		\$671,799

(1) As of August 13, 1986 - AvGas Tax was increased from 0.01¢ per gallon to 0.05¢ per gallon.

(2) As of August 18, 1987 - AvGas Refunds were eliminated except for aerial applicators.

(3) An additional \$151,541 was collected in fiscal year 1992-93, however, it was credited to the fiscal year 1993-94 numbers.

**Table 7**



## **Aviation Safety and Education**

The Division's Aviation Safety and Education Section is responsible for:

- The dissemination of aviation information
- Aviation safety programs
- Aviation/aerospace education programs
- The monitoring of aviation rulemaking and regulations
- The analysis of proposed airspace changes

## **Aviation Information**

The Aviation Safety and Education staff monitors regulatory proceedings and reviews federal proposed rulemaking notices, press releases, magazines, newsletters and journals to stay in touch with aviation safety, regulatory, and industry developments that affect Arizona. Many of these source materials are organized and retained in an aviation reference library. Regulatory and navigation data are kept current and available.

The section receives a large number of calls, letters, and other contacts from the general public, governmental entities and aviation interests each year requesting various types of aviation-related information. Information is provided on the spot, research is initiated, and referrals are made to other sources having additional specific knowledge or expertise.

## **Aviation/Aerospace Education**

During FY 1998-99, the Aviation Safety and Education Section supported the annual International Aviation Art Contest sponsored by the National Aeronautic Association, NASAO, and the FAA. Approximately 930 Arizona school children participated in the contest. 1999's theme for the contest was "Flying Is Fun".

## **Aviation Safety**

Aviation safety efforts during 1998-99 centered primarily on assisting with the FAA 5010 Airport Safety Inspection Program; and research and analysis of proposed airspace changes.

## **Additional Activities**

The Aeronautics Division, through the Aviation Safety and Education Section maintains close contact with members of aviation organizations, as well as with the general public. The Aviation Safety and Education Section also has the role of acting as an information resource for the other sections of the Division.



Sarah Nichols, Mount Eldon Middle School

## Publications

*The Annual Progress Report* is a report of the activities of the Aeronautics Division over the preceding fiscal year. It is updated annually.

*Helicopter Facts* is a pamphlet providing basic information about helicopters and how they fly. The pamphlet was designed as an educational tool for use during helicopter displays, and is provided on request.

*Bald Eagle Nesting Sites* brochure designed to provide pilots with the most specific and current information available on sensitive bald eagle nest areas in Arizona. This brochure was produced in cooperation between the Arizona Department of Transportation and the Arizona Department of Game and Fish. The brochure was updated this past year.



Margaret Neff, Mount Elden Middle School

*Arizona Aviation Facts* is a one-page reference on general aviation in Arizona. The fact sheet contains information on the number of pilots, aircraft, airports, and nav aids. Arizona Aviation Facts is updated annually.

*Desert Survival Guide* is a pamphlet outlining various desert survival principles, including specific techniques in survival situations. This pamphlet was revised and updated this past fiscal year.

### Other Available Publications

*NASAO State Aviation Data Bank* (National Association of State Aviation Officials) is a report containing information on the U.S. State Aviation Departments/Divisions outlining their staff, organization, programs, publications, number of airports, and funding information including various revenue sources and grant programs.

*Water Landing Directory* is a directory of water landing areas throughout the United States with information on location, communications and facilities.

*Arizona Transportation Fact Book* is a pamphlet containing information on Arizona's transportation infrastructure including demographics, the highway system, motor vehicles, and statistics, finance, expressways and freeways, public transit, rail, and aviation.